


Doc Code: AP.PRE.REQ

PTO/SB/33 (07-09)

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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) YOR920040025US1	
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		First Named Inventor A.K. Iyengar et al.	
		Art Unit 2464	Examiner Luat Phung
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.			
This request is being filed with a notice of appeal.			
The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.			
I am the			
<input type="checkbox"/> applicant/inventor.		Signature	
<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)		David E. Shifren	
<input checked="" type="checkbox"/> attorney or agent of record.	59329	516-759-2641	
Registration number _____		Telephone number	
<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.		July 16, 2010	
Registration number if acting under 37 CFR 1.34 _____		Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application

Applicant(s): A.K. Iyengar et al.
Docket No.: YOR920040025US1
Serial No.: 10/804,516
Filing Date: March 19, 2004
Group: 2416
Examiner: Luat Phung

Title: Method and Apparatus for Dynamically Scheduling Requests

REMARKS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants request review of the Office Action dated March 16, 2010 in the above-identified application. No amendments are being filed with this request. A Notice of Appeal is submitted concurrently herewith. Applicants incorporate by reference herein all previous responses filed in the above-identified application.

The present application was filed on March 19, 2004, with claims 1-25. Claims 1-25 remain pending, including independent claims 1, 14, 17, 18 and 25.

Claims 1, 5-9 and 14-17 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2004/0162901 (hereinafter “Mangipudi”) in view of U.S. Patent Application Publication No. 2005/0198200 (hereinafter “Subramanian”).

Claims 2-4, 18-20 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi and Subramanian in view of U.S. Patent No. 6,112,221 (hereinafter “Bender”) and U.S. Patent Application Publication No. 2003/0120705 (hereinafter “Chen”).

Claims 10-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi and Subramanian in view of U.S. Patent No. 6,981,029 (hereinafter “Menditto”).

Claim 13 is rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi, Subramanian and Menditto in view of U.S. Patent No. 6,772,211 (hereinafter “Lu”).

Claims 21-23 are rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi, Subramanian, Bender, Chen and Menditto.

Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Mangipudi, Subramanian, Bender, Chen, Menditto and Lu.

Claim 1 includes a limitation directed to a processor determining when to submit the request to the at least one server based on: (i) a quality-of-service (QoS) class assigned to a client from which the request originated; (ii) a response target associated with the QoS class; and (iii) an estimated response time associated with the at least one server.

In arguing that Mangipudi teaches determining when to submit a request to at least one server based on the factors recited in claim 1, the Examiner relies on Mangipudi at paragraph [0047], which describes “load sharing algorithms implemented in this illustrative embodiment to assign requests to back-end servers within a cluster. . . . All client requests sent to the illustrative embodiment are routed to the server selected as the most available and/or efficient server within each class according to a selected load balancing algorithm.” It is important to note that the load balancing algorithm in paragraph [0047] of Mangipudi is being used solely to select which server client requests should be routed to, without determining when those requests should be submitted to the selected server.

Indeed, the Examiner concedes that paragraph [0047] of Mangipudi does not teach determining when those requests should be submitted to the at least one server. Rather, the Examiner argues that “scheduling a task refers to the timing of performing a task.” Paragraph [0047] of Mangipudi does not describe an algorithm to be used for “scheduling,” but rather describes “load sharing algorithms . . . to assign requests to back-end servers within a cluster.”

The Examiner also describes paragraphs [0009] and [0011] of Mangipudi as disclosing “a well known technique of scheduling HTTP requests by placing them into queues [which] are serviced by the request controller based on configured policy such as length of queues, etc.” This placement into queues affects in what order the requests will be serviced by the request controller but it does not determine when the requests should be submitted to a server in the manner recited in claim 1.

Even assuming arguendo that paragraph [0011] of Mangipudi could somehow be characterized as disclosing an arrangement which includes determining when to submit a request to a server, however, paragraph [0011] does not include any such determination which is based on the three factors recited in claim 1.

Moreover, paragraph [0011] of Mangipudi describes an entirely different product from that described in paragraph [0047]. Neither the first arrangement described in paragraph [0011] of Mangipudi nor the second arrangement described in paragraph [0047] of Mangipudi meet the limitations of claim 1 at issue. One skilled in the art would not have a reasonable expectation of success in combining these two entirely separate products without undue experimentation, nor would one skilled in the art be motivated to attempt to combine these two products without improper hindsight.

Simply put, Mangipudi does not disclose any arrangement which includes determining when to submit the request to the at least one server based on: (i) a quality-of-service (QoS) class assigned to a client from which the request originated; (ii) a response target associated with the QoS class; and (iii) an estimated response time associated with the at least one server.

Subramanian fails to remedy Mangipudi so as to teach or suggest determining when to submit the request to the at least one server based on: (i) a quality-of-service (QoS) class assigned to a client from which the request originated; (ii) a response target associated with the QoS class; and (iii) an estimated response time associated with the at least one server.

With regard to the §103 rejection of claims 18 and 25, Applicants note that the Examiner concedes that Mangipudi and Subramanian fail to disclose the limitation of claim 18 directed to withholding submission of a request when the request originated from a client assigned to a first QoS class to allow a request that originated from a client assigned to a second QoS class to meet a response target associated therewith. Indeed, as discussed above, Mangipudi only discloses determining which server a request should be submitted to, not when a request should be submitted to that server, and thus fails to teach or request any withholding submission of a request.

Rather, the Examiner argues that Bender discloses the limitation at issue. It is important to note that Bender deals exclusively with scheduling execution of jobs which either have already been

submitted to the server (which Bender refers to as “on-line” scheduling) or which will be submitted at a definite future time (which Bender refers to as “off-line” scheduling). See Bender at column 3, lines 23-35. Bender does not teach or suggest any technique which involves withholding submission of requests to the server. Chen similarly does not involve withholding submission of requests to a server.

Moreover, as explained at column 5 of Bender:

At step 108, once the deadline for each uncompleted job is calculated, server system 10 schedules the jobs in accordance with an earliest deadline first (“EDF”) methodology. With an EDF methodology, the first job that server system 10 schedules is the job which has the earliest deadline, as found in step 106, relative to all of the other jobs. It then chooses the job with the next earliest deadline, and schedules it second, and so on until all of the jobs have been scheduled.

At decision step 110, server system 10 inquires whether each and every one of the jobs have completion times which is earlier than each job's respective deadline, as found in step 106. If any job is not able to be completed prior to its deadline, then the estimated stretch value is not feasible and is therefore adjusted at step 112. From step 112, the feasibility of the adjusted stretch value is re-checked by returning to step 106.

Thus, Bender schedules a job based on completion times and deadline times associated with *that particular job*. Bender does not withhold the request from submission to the at least one server when the request originated from a client assigned to a first QoS class to allow a request that originated from a client assigned to a second QoS class to meet a response target associated therewith. That is, Bender does not withhold a job based on a “response target” associated with *a particular QoS class*. Chen fails to remedy this fundamental deficiency of Mangipudi, Subramanian and Bender. Thus, Bender and Chen fail to remedy the admitted failure of Mangipudi to reach the limitations of claims 18 and 25.

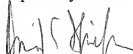
Menditto and Lu fail to remedy the above-noted deficiency of Mangipudi, Subramanian, Bender and Chen with regard to the limitations of the independent claims.

Applicants assert that the various dependent claims are not only patentable for the reasons given above but also because one or more of said claims recite separately patentable subject matter.

For example, dependent claim 2 includes limitations similar to those discussed above with reference to claims 18 and 25 and hence is believed to be similarly patentable over the cited references.

In view of the above, Applicants believe that claims 1-25 are in condition for allowance, and again respectfully request withdrawal of the various remaining rejections.

Respectfully submitted,



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Date: July 16, 2010